BRUHAT BANGALORE MAHANAGARA PALIKE

Dasarahalli Zone, Electrical Division

22

Name of work :- Providing LED Street lights/Poles/Control switches/control wires at Dark/volernabal places in Ward no 12

Budget Head

Ward No.12 **Estimate No.,**

23949000.00

Sl No	SR PAGE NO	Description Of Work	Unit	Qty	Rate	Amount
1	66/12 8 4	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08 Power Factor >0 9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection Compatible for pole mouting with outer dia of 40mm to 50mm Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS UL approved MCPCB Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools LED Light fixture with W System Powerconsumption LED Efficiency>130lm/w, nominal CRI >75 Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001 2008 Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source LED Streetlight 90 Watts	Nos	1900	7160	13604000
2	13/4 1 1	Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M S base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7 5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch. The pole shall be erected in cement concrete work (1 2 4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0 6M above ground level as per IS 2713 - 7 Erection of heavy duty pole on Footpath / median 9Mt (5Mt Hb,165 1mm dia 4 85mm thick x2M Hm, 139 7mm dia 4 50mm thick x 2M Ht,114 3mm dia 3 65mm thick) as per IS 410 SP 32	Each	170	13200 00	2244000
3	16/4 7 2	Supplying, and fixing of Hot dip Galvanized M S Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete Single Arm Bracket with 1500mm Standard 40/50MM dia	Each	170	2112 00	359040

Executive Engineer
Dasarahalli Zone, Electrical Division
Bruhat Bangalore Mahanagara Palike

Scanned by CamScanner

4	79/14.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	1900	175.00	332500
5	79/14.1.2	Supplying and Fixing of mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G I Pipe	Each	1750	835.00	1461250
6	40/6.4.4	Supplying of 1 1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtrs	6400	150.00	960000
7	7/2.7/2.7.1	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring 4 sqmm	Mtrs	4900	9.00	44100
8	40/6.4.5	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 3.5 core 25 sqmm	Mtrs	678	180.00	122040
9	41/6.5.1	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.6 sqmm to 16 sqmm	Mtrs	6400	11.88	76032
10	41/6.5.2	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.25sqmm to 75 sqmm	Mtrs	1000	15.50	15500
11	41/6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary)	Mtrs	5800	76.00	440800
12	40/6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	Nos	8	2999.70	23997.6
13	40/6.3.1	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required 25x3mm GI strip	Mtrs	40	75.00	3000
14	30/5.42.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc , complete 16SWG	Sqcms	75000	0.35	26250
15	30/5.41.1	Supplying and fixing angle iron frame work fabricated out of M S angle iron and M S flat with bolts, washers etc , and painted with 2 coats of red oxide and then two coats of approved paint 40x40x6mm	Mtrs	25	255.00	6375

Executive Engineer
Electrical Division
Mahanagara Palike

Scanned by CamScanner

	27/5 14.7	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)FOUR POLE 100Amps 25kA	Each	2	6400 00	12800
17	15/5 48	Supplying and fixing Microprocessor Based Astronomical timer Switch with using necessary bolts, nuts and washers	Each	2	4030 00	8060
18	26/5 13.4	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947 100 to 125Amps	Each	2	7200 00	14400
19	27/5 17.9	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898 50-63Amps TPN	Each	8	2397 00	19176
20	3 8	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws	Sqcms	10000	0 27	2700
21	6/2.5.2	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS 8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts **as per IS-694:1990 3C X 1.5Sq.mm**	Mtrs	2800	55 00	154000
22	6/2.3.3	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694 confirming to latest amendments 6 sqmm	Mtrs	62	70 00	4340
23	43/6 17.1	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes a)1 5 sqmm	Each	340	3 00	1020
24	6.17.4	b) 6 Sqmm	Each	120	7 00	840
25	6.17.6	c) 16 Sqmm	Each	1360	12 44	16918 4
26	6.9.1	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3 25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1 1 KV 40mm	Mtrs	10	335 00	3350
27	6 10 3	Supplying and fixing L T cast Iron pot heads suitable for 1 1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc 25Sqmm	Each	8	350 00	2800
		BESCOM SR 2018-19				

Executive Engineer
Electrical Division
Palike

Scanned by CamScanner

28	145/300/41 07	1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255 1995 XLPE Insulation Parameter shall be as below 1 Hot Set Test a) Elongation under Load 50% (Max) b) Permanent Elongation After Cooloing 3% (Max) 2 Thermal Aging in oven a) Tensile Strength 16 N/mm² (Min) b) Elongation 375% (Min) 3 Water Absorption Test a) Water absorbed 0 5 mg/cm² (Max) 4 Carbon Black Content shall be ranging from 2% to 3% 3x25 + 1x25 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)				
29	224/270/34 04	Stringing of 1 1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x25) (Street Light Control)	Km	1.050	22469.00	23592.45
30	128/1/1 01	RCC Pole - 9 Mtr Long, 145 Kg WL	Nos	10	6258.00	62580
31	21/XIV/a	LT 2 Pin Cross Arm with clamps, bolts, nuts & washers with braces - MS for RCC pole	set	80.00	274.00	21920
32	22/XIX/c	c) No 8 Strain Insulator	Nos	30.00	16.00	480
33	225/304/35 02	Laying of UG Cables by trenchless technology by adopting horizontal boring & Drawing of cable including preparation at site With HDPE Pipe i) Normal soil 5/6" bore size	Mtrs	30	848.00	25440
		Total Rs				20247651.45
		Add 12% GST			20247651.45	2429718.174
		5%Tender Premium+1%PMC Charges				1214859.087
		BESCOM Charges				56771.29
		Grand Total Rs				23949000.00

CERTIFICATE :-

1 The place was inspected and the work is essential
2 The provision made in the estimate are adequate and necessary and the work comes in the BBMP limit and is legitimate Charges on the BBMP funds
3 The estimate is based on KPWD (Ele) & Civil S R of 2019-20 /BESCOM SR2018-19
4. This work is not taken up in any other grant.

Juniour/ Assistant Engineer (Ele)
Dasarahalli Zone

Assistant Executive Engineer (Ele)
Dasarahalli Zone

Executive Engineer (Ele)
Dasarahalli Zone, BBMP

ಸಂ.01 ಬಾ.ಅ(ವ):ದಾವ: 01 2022-2023
ದಿನಾಂಕ 12/04/2022 ರಂದು 23949000 ಅಕ್ಷರದಲ್ಲಿ
ಮಂಜೂರಾತಿ ನೀಡಿದೆ.
ಆದಾಯ ಮತ್ತಿಗೆ ಅವಶ್ಯಕತೆ ದೃಢೀಕರಿಸಿ ನೀಡಿದೆ
ಮಟಿ ಸಂಖ್ಯೆ 38 ದಿನಾಂಕ 01
ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಯವರು (ವ)
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು

Scanned by CamScanner